

数学与系统科学研究院

计算数学所学术报告

报告人: 徐振礼 教授

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报告题目:

**Poisson-Nernst-Planck equations
with self-energy effect**

邀请人: 季霞 副研究员

报告时间: 2016 年 1 月 20 日 (周三)

下午 10:00-11:00

报告地点: 科技综合楼三层

311 报告厅

Abstract:

In this talk, we discuss a self-consistent field theory to describe the ion-correlation in electrolytes by taking the ion-size effect into account. This theory is generalized to describe ion transport in the framework of Poisson-Nernst-Planck equation. We developed asymptotic and numerical strategies to solve the resulted PDEs, and report the study on the effect of ion correlation and dielectric boundary in different applications, and the validation of the model by Monte Carlo particle simulations.

欢迎大家参加！